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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

VO, HAI

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 03/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/800,588

Applicant(s)

TOMASI, GIAMPAOLO

Examiner

Hai Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 16-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-15 in Paper No. 8 is acknowledged.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-15 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitations "wherein said mixture of ingredients does not include carbodiimide catalyst containing phospholene oxide and heterocyclic nitrogen containing polyols containing at least two beta-hydroxy terminated carbamate groups" are nowhere supported in the Applicant's specification.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4, and 11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Regenauer (US 5,185,383).

Regenauer discloses a composition for making a rigid, closed cell polyurethane foam without the use of fluorinated hydrocarbons (column 1, lines 5-10). Regenauer discloses the composition comprising one polyol, one isocyanate compound, a surfactant, water and a tertiary amine catalyst (column 2, lines 40-60). Regenauer teaches a heat insulating building element comprising one supporting substrate coupled to a rigid polyurethane foam (column 9, lines 9-10, and 23-25). Since the composition of Regenauer meets all the components required by the claims, it is the examiner's position that an adhesion strength to a supporting substrate, a percent linear dimensional variation, a friability, heat conductivity would be inherently present. Products of identical chemical composition can not have mutually exclusive properties. In re Spada, 15 USPQ 2d 1655 (1990). Note In re Best 195 USPQ at 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made under 35 USC 102.

7. Claim 5, 7, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Regenauer (US 5,185,383). Regenauer discloses a composition comprising:

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Component A including polyisocyanate, and component B in a 1:1 volume ratio wherein component B is composed of 24 to 40 parts of polyester polyol having a functionality of from 3-5 and a hydroxyl number of from 300-900 (column 5, lines 47-49, table I), 0.6 to 6 parts of water, 0.5 to 1.5 parts of a surfactant based on 100 parts of component B. The foam composition of Regenauer does not meet the specific ranges as claimed in the present invention. However, Regenauer further teaches the weight of the respective components are selected to provide substantially lower equivalent numbers of isocyanate groups on component A and hydroxyl groups in component B (column 4, lines 14-16). Therefore, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the foam composition having the concentration instantly claimed motivated by the desire to provide substantially lower equivalent numbers of isocyanate groups on component A and hydroxyl groups in component B, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

With regard to claim 7, Regenauer discloses a composition comprising Component B that is composed of 24 to 40 parts of polyether polyol having a functionality of from 3-5 and a hydroxyl number of from 300-900 (column 6, lines 14-17, table I).

With regard to claim 9, Regenauer discloses a composition comprising 7.5 to 22.5 parts of a tri(haloalkyl phosphate) as a flame retardant agent.

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8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Regenauer (US 5,185,383) as applied to claim 1 above, further in view of Hopkins, Jr. et al (US 4,071,482). Regenauer is silent as to a halogenated polyol. Hopkins, Jr. teaches a polyurethane foam composition comprising a phosphorous based polyol having a hydroxyl number of 300 and a functionality of 2-3 (column 4, lines 54-56). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ phosphorous based polyol in the foam composition motivated by the desire to increase the fire resistance of the foam.
9. Claim 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Regenauer (US 5,185,383) as applied to claim 1 above, further in view of EO 0716 107. Regenauer is silent as to the building element comprising a composite structure substantially of the sandwich type wherein the rigid polyurethane is sandwiched between the two plates. EP'107 discloses an insulation panel having a recited structure (claim 4, figure 2). It would have been obvious to one having ordinary skill in the art at the time the invention was made to form an insulation panel having a sandwich composite structure as taught in EP'107 because it is of a typical and practical design of the insulation panel.

With regard to claims 13, 14, Regenauer is silent as to the building element comprising a protective film applied on the rigid polyurethane foam on a side thereof opposite to the supporting substrate. Figure 3b of EP'107 shows a plastic sealant **31** and a piece of moisture preventive tape **32** to keep the foam inside the panels. It would have been obvious to one having ordinary skill in the art at the time the

invention was made to form a protective film on the rigid polyurethane foam on a side thereof opposite to the supporting substrate motivated by the desire to protect the foam against moisture damage.

With regard to claim 15, EP'107 discloses an insulation panel made from the rigid foam having been used as a building wall (page 2, lines 33-34). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use an insulation panel as a building wall because it is of a typical and practical design of the insulation panel.

Response to Arguments

10. Applicant's arguments with respect to claims 1-5, and 7-15 have been considered but are moot in view of the new ground(s) of rejection.
11. The art rejections in Paper no. 6 have been overcome by the present amendment and response.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (703) 605-4426. The examiner can normally be reached on Tue-Fri, 8:30-6:00 and on alternating Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

HV
March 24, 2003


ELIZABETH M. COLE
PRIMARY EXAMINER